REMARKS/ARGUMENTS

The Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter in this application.

Applicant has amended claims 5 and 8 to use consistent language.

The Examiner has objected to claims 1-9 because it is unclear if the apparatus cited in lines 19-20 of claim 1 is different from the one recited in the preamble. Applicant has amended claim 1, 3-6, and 9 to provide clarification to include a "second" wireless communication apparatus.

Regarding claim 3, the Examiner has objected to the limitation "an already known signal transmission unit which transmits an already known signal". Applicant has considered the Examiner's suggested amendment; however, Applicant asserts that "an already known signal transmission unit" and "an already known signal" are two different elements within the limitation. Also, these elements are first introduced in lines 4-5 of claim 3. Therefore, if applicant amended "an already known signal" to "the already known signal" as the Examiner suggested, Applicant feels that antecedent basis would not be proper. Thus, lines 4-5 of claim 3 will not be amended.

With further reference to claim 3, the Examiner has stated claim 3 would be allowable since prior art fails to teach that the different/second communication apparatus transmits a known signal to first wireless communication apparatus. See page 7 of the Office action. However, this statement of reasons includes an error. As shown in revised claim 3, it states that the already known signal is transmitted to the *second wireless communication apparatus*.

Claims 3-9 are rejected under 35 U.S.C. 112, second paragraph. The Examiner has rejected claim 3 because it is not clear whether the two wireless communication apparatus are different or the same wireless communication apparatus is communicating with itself. Applicant has amended claim 3 to include a "second" wireless communication apparatus. Therefore, Applicant requests that this rejection be withdrawn.

Claim 1 stands rejected under 35 U.S.C. 103(a) over Walton et al. (U.S. Patent Application No. 2008/0037681), hereinafter "Walton", in view of Wallace et al. (U.S. Patent Application No. 2005/0185728), hereinafter "Wallace". For at least the following reasons, the Examiner's rejection is respectfully traversed. The asserted combination of Walton and Wallace, independently or in combination, does not teach, suggest, or otherwise render obvious or predictable the claimed invention.

The asserted combination does not disclose that a correction value detection unit "detects a correction value for correcting deviation" as claimed by claim 1. The Examiner cites controller 480 in Fig. 4 and paragraph 0122 of Walton as support for the rejection of claim 1. Applicant assumes that the Examiner is using the sentence "Controller 480 for each user terminal typically derives the spatial filter matrix $M_{ut,m}$ for the user terminal based on the downlink channel response matrix $H_{dn,m}$ for that user terminal" from Walton as support for the rejection. Applicant respectfully asserts that $M_{ut,m}$ is not a "correction value" as is claimed by claim 1. Walton specifically states that "Controller 480…derives the spatial filter matrix $M_{ut,m}$" and that the matrix $M_{ut,m}$ is only a component for reconstructing the transmitted data symbol stream. (See paragraph 122 and 131). Additionally, Walton states "At the user terminal 120m, the received symbol vector $r_{dn,m}$ is multiplied with a spatial filter matrix $M_{ut,m}$ by a unit 660 and further scaled with a diagonal matrix $D_{dn,m}^{-1}$ by a unit 662 to obtain a downlink recovered data symbol stream $\{s_{dn,m}\}$". (See paragraph 131). Thus, as stated by Walton, the computations involving $M_{ut,m}$

reproduce a data symbol stream in the user terminal, that originates from the base station. Simply stated, in this instance, the controller 480's only function is to derive a variable necessary to reconstruct the transmission. Once $M_{ut,m}$ is derived, it is forwarded to another processer for further computation. Therefore, the controller fails to "*detect a correction value* for correcting deviation" as stated in claim 1. Thus, even if Walton were combined with Wallace, a correction value detection unit that "detects a correction value for correcting deviation" would not be taught, suggested, or otherwise rendered obvious or predictable by the resulting combination.

With further reference to claim 1, The Examiner states that the controller 480 of Walton controls the deviation calibration between transmission and receiver circuitry. However, even if the spatial filter matrices $M_{ut,m}$ is regarded as a correction value, the deviation calibration is performed between the transmission circuitry 420 of AP 110 and the receiver circuitry 460 of UT 454 (or between receiver circuitry 440 and the transmission circuitry 490). That is, in Walton, the deviation is calibrated between the transmission circuit of the communication unit and the reception circuit of *another* communication unit. On the other hand, in the claimed invention, the deviation is corrected between the transmission circuit and the reception circuit *both included in the (same) wireless communication apparatus*. This feature is not taught for suggested by the prior art of record. Accordingly, the combination of Walton and Wallace is improper, and fails to render claim 1 obvious. Therefore, Applicant respectfully requests that the rejection of claim 1 be withdrawn.

Claim 2 stands rejected under 35 U.S.C. 103(a) over Walton, in view of Wallace, and in further view of Chien (U.S. Patent Application No. 2007/0275674), hereinafter, "Chien". For at least the following reasons, the Examiner's rejection is respectfully traversed. The asserted combination of Walton, Wallace and Chien independently or in combination, does not teach, suggest, or otherwise rendered obvious or predictable by the claimed invention.

Regarding claim 2, Chien fails to disclose that transmission weight is generated "using the reception weight and the correction value from the correction value detections unit". The Examiner alleges that the reception weight generation unit and transmission weight generation unit are disclosed by Fig. 7, 726 and 776, respectively. However, Fig. 7 fails to disclose that the transmission weight is generated from an input from the reception weight as well as the correction value. Additionally, Chien states that "the receiver compensation factor estimator 726 estimates the compensation factors for the receiver and the transmitter compensation factor estimator 776 *estimates the compensation factors for the transmitter.*" (See paragraph 0099 of Chien). Thus, the transmitter combination factors are not related to the *reception* weight as stated in claim 2. Therefore, even if Chien were combined with Walton and Wallace, the limitation that transmission weight is generated "using the reception weight and the correction value from the correction value detections unit" would not be taught, suggested, or otherwise rendered obvious or predictable by the resulting combination. Accordingly, the combination of Walton, Wallace and Chien is improper, and fails to render claim 2 obvious. Applicant requests that the rejection of claim 2 be withdrawn.

The Examiner stated that claims 3-9 contain allowable subject matter. Applicant agrees with the Examiner. However, the arguments presented herewith favor the allowance of claims 1 and 2, as the cited references fail to render obvious all the claimed limitations of claim 1 and 2. Therefore, claims 3-9 remain directly or indirectly dependent on claim 1.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned agent to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. NGB-41035.

Respectfully submitted,

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